Amendments to the Claims:

1-12. (Cancelled)

13. (Currently Amended) A magnetic resonance compatible stent for use in intravascular therapy, the stent comprising:

a plurality of electrically conductive elements arranged in a generally tubular structure, the conductive elements comprising generally diagonally arranged struts with respect to a central axis of the stent, the conductive elements comprising:

a plurality of loops disposed about a central axis of the stent; and

a plurality of linking members for joining the loops such that the loops and linking members form a generally tubular structure around the central axis of the stent; and

a plurality of non-conductive connector nodes disposed among the conductive elements for directing [[a]] currents induced by RF signals in an examination region of a magnetic resonance apparatus to flow in the conductive elements such that ~~adjacent segment~~ the currents flowing in adjacent conductive elements cancel each other and a net current flowing in the stent is substantially minimized;

wherein the loops and linking members are connected within the non-conductive connector nodes such that the current flowing through adjacent loops substantially cancel each other.

14-15. (Cancelled)

16. (Previously Presented) A stent comprising:

a plurality of electrically conductive struts connected by a plurality of insulating nodes to define a diamond-shaped mesh of the conductive struts, the plurality of conductive struts and insulating nodes being disposed in a cylinder to define a generally tubular diamond-shaped conductive mesh, the conductive struts being electrically connected to define a plurality of loops of struts in a zig-zag pattern

extending peripherally around the cylinder, each loop being electrically connected to each adjacent neighboring loop in such a manner that currents induced in the zig-zag loops during a magnetic resonance examination flow in opposite peripheral directions and are substantially cancelled by one another.

17-18. (Cancelled)

19. (Currently Amended) The stent according to claim 16, wherein each zig-zag loop is electrically connected to each neighboring zig-zag loop only once and mechanically connected at a plurality of locations by a plurality of the non-conductive connector nodes.

20. (Currently Amended) The stent according to claim 16, wherein each zig-zag loop is electrically connected to its neighboring zig-zag loop alternately at 90° intervals.

21. (Currently Amended) A stent which inhibits interaction with an MR system, the stent comprising:

two conductive expandable mesh layers with an elastic layer of non-conductive material in between, each mesh layer including a plurality of electrically conductive elements connected to define a conductive pattern along which currents induced by the MR system flow, the conductive patterns of the two conductive mesh layers overlaying each other and being configured such that the current induced in one of the conductive patterns is equal and opposite to the current induced in the conducitve patterns of the other layer such that the currents cancel each other.

22. (New) The stent according to claim 13, wherein the plurality of electrically conductive elements are disposed in first and second layers.

23. (New) The structure according to claim 22, further including:

an elastic layer of non-conductive material disposed between the first and second layers.

24. (New) The stent according to claim 23, wherein the conductive elements in the second layer overlay the conductive elements in the first layer and the non—conductive connector nodes connect the conductive elements of the first and second layers such that the currents flowing in the conductive elements of the second layer cancel the currents flowing in the conductive elements of the first layer.

25. (New) The stent according to claim 16, further including:

a plurality of second electrically conductive struts connected by a plurality of second insulating nodes to define a diamond-shaped mesh of the second conductive struts, the plurality of second conductive struts and second insulating nodes being disposed in a second cylinder to define a second generally tubular diamond-shaped conductive mesh, the second conductive struts being electrically connected to define a plurality of second electrically conductive_loops of second conductive struts in a zig-zag pattern extending peripherally around the second cylinder, each second loop being electrically connected in such a manner that currents induced in the second loops during a magnetic resonance examination flow in opposite peripheral directions to currents flowing in adjacent loops of the first cylinder and are substantially cancelled by one another.

26. (New) The stent according to claim 25, further including:

an elastic layer of non-conductive material disposed between the first and second cylinders.

27. (New) The stent according to claim13, further comprising:

first and second layers of the diamond-shaped mesh with an elastic layer of non-conductive material in between, each conductive mesh layer including a plurality of the electrically conductive struts connected by the insulating nodes to define a conductive pattern along which the currents induced by the MR system flow, the conductive patterns of the first and second conductive mesh layers overlaying each other and being configured such that the current induced in the conductive

pattern of the first layer is equal and opposite to the current induced in the conductive pattern of the second layer such that the currents cancel each other.